

F

Feeding devices. Automatic. (Paul H. Winter) Jan. p. 39
 Finishing. Roto-finish. (Arthur P. Schulze) Apr. p. 35
 Fishback, Philip G. Gage control and measuring techniques. May p. 25
 Fixture to notch carbide. (E. Diskavitch) June p. 37, Gadget
 Fixture, roll-over. Automotive frames. Jan. p. 29, Short, see also
 Truck frames.
 Flow control by blankholder pressure. (J. W. Lengbridge) Sept. p. 23
 Flow of metals in drawing operations. (J. W. Lengbridge) Aug. p. 21
 Flow of metal in rectangular draws. (J. W. Lengbridge) Aug. p. 23
 Formulas for rope. (W. F. Schaphorst) Feb. p. 43, Gadget
 Frank, C. W. Induction heating coil made adjustable. Oct. p. 41,
 Gadget
 Frank, C. W. Lock for geneva index table. Sept. p. 41, Gadget
 Frank, C. W. Toolholder for solid blanks. Aug. p. 61, Gadget
 Fume separator. Industrial uses. Feb. p. 36, Short
 Fundamental factors of practical die design. (S. P. Karnitz) July p. 34
 Fundamentals of broaching. (John A. Markstrum) Aug. p. 30
 Fundamentals of job shop scheduling. (Joseph Kim) Oct. p. 31
 Fundamentals of plant layout. (A. E. Rylander) Feb. p. 31
 Fundamentals of tool engineering. (A. E. Rylander) Aug. p. 59; Sept.
 p. 39; Oct. p. 39; Nov. p. 36; Dec. p. 38

G

Gabriel, Adam. Proposed bill on the units of length. Jan. p. 45
 Gage for tapered bearings. (R. G. Winter) Aug. p. 62, Gadget
 Gage control and measuring techniques. (Philip G. Fishback) May p. 25
 Gage. Wire. (Edward Diskavitch) Apr. p. 41, Gadget
 Gear gage paper weight. (George Scherr Co.) Feb. p. 43, Gadget
 Gears. Load rating. (Earle Buckingham) June p. 33
 General Electric Co., Apparatus Dept. Cutting and horsepower formula
 and chart. Sept. p. 34
 Giesdahl, M. S. Education and the tool engineer. Apr. p. 39
 Glass "blanket" for stretch forming. (Rex Heath) Aug. p. 58
 Good reading (Department): Jan. p. 65; Apr. p. 60; June p. 56; July
 p. 54; Aug. p. 63; Sept. p. 53; Oct. p. 52; Nov. p. 49; Dec. p. 54
 Graduated angle plate. (Edmund L. Johnson) Feb. p. 43, Gadget
 Gravity pressure for drawing dies. (Frederico Strasser) Nov. p. 34
 Guess, R. D., and Libsch, J. F. Selective hardening of wear surfaces.
 May p. 31
 Grinding. Jig. (Watson N. Nordquist) Jan. p. 37
 Grinding. Internal. Jan. p. 29, Short
 Grinding wheels. Internal cooling. (Alexander Maxwell) Dec. p. 31

H

Hardening. Selective. Wear surfaces. (J. F. Libsch and R. D. Guess)
 May p. 31
 Hardening. Surface. (Anders Jansson) Jan. p. 47
 Harmon, C. R. and Reitler, E. J. Tungsten carbide blanking dies. Mar.
 p. 47
 Haynes, Robert W. Tooling up the job. Sept. p. 37
 Heath, Rex. Glass "blanket" for stretch forming. Aug. p. 58
 Heath, Rex. "News" on the production front. Apr. p. 29
 Heath, Rex. Standardized guns cut welding costs. Sept. p. 36
 Hildebrandt, Arnold. Automatic spinning of stainless steel. Sept. p. 20
 Holland, I. F. They will see and believe. Apr. p. 1
 Holland, I. F. Prelude to preparedness. May p. 1
 Holland, I. F. Tool engineering's sesqui-centennial. June p. 1
 Holland, I. F. Firecrackers and free enterprise. July p. 1
 Holland, I. F. Progress on the Pacific. Aug. p. 1
 Holland, I. F. The truth is on our side. Sept. p. 1
 Holland, I. F. Tool engineers as missionaries. Oct. p. 1
 Holland, I. F. Thanksgiving thoughts. Nov. p. 1
 Holland, I. F. And it shall come to pass. Dec. p. 1
 Hoppers. Automatic. (A. E. Rylander) Sept. p. 17
 Horn, J. L. Research facilities for industry. July p. 34
 Huge lathe speeds turning of diesel crankshafts. Feb. p. 25, Short
 Hydraulic pressure unit. (George W. Brown) June p. 57, Gadget

I

Index. Numerical. Jan. p. 38, Short
 Index to vol. XVII (Aug. 1946 to Jan. 1947) Apr. p. 60
 Index to vol. XVIII (Feb. 1947 to July 1947) Mar. p. 69
 Index to vol. XIX (Aug. 1947 to Jan. 1948) Feb. p. 44
 Index table. Lock. (C. W. Frank) Sept. p. 41, Gadget
 Induction heating coil made adjustable. (C. W. Frank) Oct. p. 41,
 Gadget
 Induction heating coils. Single vs Multi-turn. (Frank W. Curtis)
 Oct. p. 38
 Industrial diamonds. Application. (E. A. Ryden) Nov. p. 24
 Industrial safety and the tool designer. (H. L. Smith) Apr. p. 25
 Inserted-tooth milling cutter. (Carl Bjorklund) Nov. p. 39, Gadget
 Inspectors ride high at Conair. Apr. p. 28, Short
 Interesting setup for automatic cycle stud welding. Oct. p. 33, Short
 Internal cooling of grinding wheels. (Alexander Maxwell) Dec. p. 31
 Introduction to aluminum presswork. (J. W. Lengbridge) June p. 17
 Introduction to cutting tools. (E. A. Rylander) Aug. p. 59
 Introduction to plant layout. (A. E. Rylander) Jan. p. 17
 It pays to experiment. (George W. Bruck) June p. 36

J

Jansson, Anders. A "new" for production surface hardening. Jan. p. 47
 J. J. Kohl elected president of tool and die manufacturers. Dec. p. 28,
 Short
 Jet engineers "build a fire". July p. 20, Short
 Job planning on the turret lathe. (E. L. Murray) Feb. p. 17; Mar. p. 33
 Johnson, Edmund L. Graduated angle plate. Feb. p. 43, Gadget
 Johnson, Edmund L. Positioner-stop for drilling. Apr. p. 41, Gadget
 Johnson, Edmund L. Self-aligning back rest. Jan. p. 65, Gadget
 Johnson, Edmund L. Versatile tool holder. Mar. p. 51, Gadget

K

Kennedy, C. W. Let the machine talk. Apr. p. 17
 Kim, Joseph. Fundamentals of job shop scheduling. Oct. p. 31
 Kinne, E. H. Automatic two-positioner stop. Dec. p. 40, Gadget
 Kuhn, Emil. Cutting and fragmentation formulae. June p. 43, July p. 25

L

Lambert, Charles E. Accurate drilling without a jig. Jan. p. 30
 Lengbridge, J. W. Theory and practice of pressing aluminum. June p. 17;
 July p. 21; Aug. p. 23; Sept. p. 23; Oct. p. 23; Nov. p. 27; Dec. p. 34
 Let the machine talk. (C. E. Kennedy) Apr. p. 17
 Libsch, J. L. and Guess, R. D. Selective hardening of wear surfaces.
 May p. 31
 Licensing of tool engineers. Compulsory. (Robert B. Douglas) Oct. p. 21
 Load rating of gears. (Earle Buckingham) June p. 33
 Locator for drill jig. (E. E. Woodman) July p. 36, Gadget
 Locating pin. Retractable. (John J. Boe) Sept. p. 42, Gadget
 Lock for geneva index table. (C. W. Frank) Sept. p. 41, Gadget
 Lovisek, Louis J. Design and function of a sliding cone punch. Apr. p. 21
 Lubrication extends band saw life. (H. L. Chamberland) Oct. p. 36

M

McArthur, F. J. Milling-drilling attachment saves handling. Sept. p. 30
 McDonald, D. E. Centering tool for milling cutters. Jan. p. 36
 Machining large work. (E. K. Morgan) Sept. p. 31
 Maltby, James. Driver for shanked tools. June p. 37, Gadget
 Maltby, James. Emergency "hard" drill. Dec. p. 41, Gadget
 Maltby, James. Plunger to eject work. Sept. p. 42, Gadget
 Maltby, James. Screw feed for tailstock. July p. 35, Gadget
 Markstrum, John A. Fundamentals of broaching. Aug. p. 30
 Martindell, Frank. Piano wire for eyelet machine needles. Nov. p. 38,
 Gadget
 Martindell, Frank. Predicting results of conveyor line assembly. Nov.
 p. 33
 Materials handling survey. (E. A. Ryder) Aug. p. 21
 Matter, James K. Drilling 18-8 stainless steel. Oct. p. 29
 Mawson, Robert. An improved cam movement. Dec. p. 41, Gadget
 Mawson, Robert. (combination tool design) July p. 35, Gadget
 Mawson, Robert. Drill fixture for machine tool headstock. Apr. p. 38
 Mawson, Robert. Drill jig for hex tube. Jan. p. 65, Gadget
 Mawson, Robert. Precision combination case. Nov. p. 38, Gadget
 Mawson, Robert. Rotary drill jig features simple design. Oct. p. 42,
 Gadget
 Maxwell, Alexander. Internal cooling of grinding wheels. Dec. p. 31
 Measuring instruments. Wood. (Dr. N. N. Sawin) June p. 27
 Measurement. Proposed bill on units of length. (Adam Gabriel) Jan.
 p. 45
 Metal cutting. Thermal aspects. (A. O. Schmidt and J. R. Roubik)
 Nov. p. 20
 Metal gauge comparator chart. Jan. p. 35, Short
 Metal molds for plastics. (Thomas A. Dickinson) Mar. p. 27
 Metal spraying—a modern production process. (A. E. Rylander) Nov.
 p. 25
 Metals comparator. (General Electric Co.) Feb. p. 43, Gadget
 Milling cutter. Inserted-tooth. (Carl Bjorklund) Nov. p. 39, Gadget
 Milling-drilling attachment saves handling. (F. J. McArthur) Sept. p. 30
 Milling on the drill press. (R. Andrews) Nov. p. 39, Gadget
 Modified geneva drive for hi-speed machines. (Paul H. Winter) May
 p. 23
 More power to America. Apr. p. 20, Short
 Morgan, E. K. The "how" of machining large work. Sept. p. 31
 Motor generators. Servicing. Sept. p. 29, Short
 Murray, E. L. Job planning on the turret lathe. Feb. p. 17; Mar. p. 33
 Myers, F. W., Jr. Nomenclature and applications of welding electrodes.
 July p. 29

N

New high speed motor may revolutionize internal grinding. Jan. p. 29,
 Short
 New press for powder metals. Feb. p. 42, Short
 "News" on the production front. (Rex Heath) Apr. p. 29
 New pantograph simplifies duplicating. (Gunnar Skog) Feb. p. 26
 Nomenclature and applications of welding electrodes. (F. W. Myers,
 Jr.) July p. 29
 Nordquist, Watson N. Development of economical jig grinding. Jan. p. 37
 Nordquist, Watson N. Efficient tool engineering cuts motor costs. May
 p. 33
 Nordquist, Watson N. Pacific industry forges ahead. Aug. p. 46
 Notes on numerical index. Jan. p. 38, Short
 Novel injection cylinder. Mar. p. 50, Short
 Now!—tungsten plated to high speed steel. Jan. p. 36, Short
 North, east, west, south in industry (Department): Jan. p. 66; Feb.
 p. 63; Mar. p. 73; Apr. p. 65; May p. 63; June p. 59; July p.
 59; Aug. p. 66; Sept. p. 55; Oct. p. 55; Nov. p. 53; Dec. p. 57

O

Oscillating forming die. (Federico Strasser) Aug. p. 62, Gadget
 Owen, Halsey F. What is tool engineering? Nov. p. 17

P

Pacific industry forges ahead. (Watson N. Nordquist) Aug. pp. 46
 Paints. Exterior. Masonry. Apr. p. 41, Short
 Parks, John R. Bellows type thermostat. Feb. p. 27
 Patterns from casting resins. (Robert W. Shaeffer) June p. 31
 Pierce, W. B. We need industrial statesmanship. Jan. p. 1
 Pierce, W. B. Accelerating industrial progress. Feb. p. 1
 Pierce, W. B. The world looks to America. Mar. p. 1
 Periodical literature for the tool engineer. Mar. p. 72, Short
 Pin wire for eyelet machine needle. (Frank Martindell) Nov. p. 38,
 Gadget

Piloted boring bars. (A. E. Rylander) Nov. p. 36
 Piston pin hole production. (A. Francis Townsend) Dec. p. 29
 Planning for plant layout. (A. E. Rylander) Mar. p. 41
 Plant layout. Fundamentals. (A. E. Rylander) Feb. p. 31
 Plant layout. Introduction. (A. E. Rylander) Jan. p. 17
 Plant layout. Planning. (A. E. Rylander) Mar. p. 41
 Plastics. Metal molds. (Thomas A. Dickinson) Mar. p. 27
 Plating. Tungsten to high speed. Jan. p. 36, Short
 Plunger to eject work. (James Maltby) Sept. p. 42, Gadget
 Positioner-stop for drilling. (Edmund L. Johnson) Apr. p. 41, Gadget
 Powder metals. see Press
 Pratt, Doris. ASTE salutes progress on the Pacific. Aug. p. 33
 Pratt, Doris. East meets west at Los Angeles convention. Dec. p. 17
 Precision boring tool design. (A. E. Rylander) Dec. p. 38
 Precision casting—a production achievement. (Chester S. Ricker) Sept. p. 27
 Precision combination case. (Robert Mawson) Nov. p. 38, Gadget
 Precision measuring instruments made from wood. (Dr. N. N. Sawin) June p. 27
 Precision "stamping" on the broaching machine. June p. 29, Short
 Predetermined speed control of air cylinders. (Paul H. Winter) Aug. p. 27
 Predicting results of conveyor line assembly. (Frank Martindell) Nov. p. 33
 Press for powder metals. Feb. p. 42, Short
 Presswork. Aluminum. (J. W. Lengbridge) June, p. 17; July p. 21; Aug. p. 23; Sept. p. 23; Oct. p. 23; Nov. p. 27; Dec. p. 34
 Private seminar on standardization. Jan. p. 44, Short
 Procedures for drawing flanged shells. (James Walker) Feb. p. 37
 Proposed bill on the units of length. (Adam Gabriel) Jan. p. 45
 Pros and cons of a formula for drawing shells. (James Walker) June p. 35

Q

Quality control. War-time methods fight postwar inflation. July p. 33, Short

R

Redrawing operations on circular and rectangular shells. (J. W. Lengbridge) Oct. p. 27
 Reduction factors in drawing operations. (J. W. Lengbridge) Oct. p. 23
 Reiter, E. J., and Harmon C. R. Tungsten carbide blanking dies. Mar. p. 27
 Retractable locating pin. (John J. Boe) Sept. p. 42, Gadget
 Ricker, Chester S. Precision casting—a production achievement. Sept. p. 27
 "Roll-over" truck frames. Nov. p. 23, Short. See also Fixture, roll-over
 Rotary drill jig features simple design. (Robert Mawson) Oct. p. 42, Gadget
 Roto-finish spurs finishing economies. (Arthur P. Schulze) Apr. p. 35
 Roubik, J. R. and Schmidt, A. O. Some thermal aspects of metal cutting. Nov. p. 20
 Round tee-slots. (from *Verstaderna*) Oct. p. 42, Gadget
 Ryden, E. A. Application of industrial diamonds. Nov. p. 24
 Ryder, E. A. Coiling enamel coated wire. Oct. p. 41, Gadget
 Ryder, E. A. The "how" of a materials handling survey. Aug. p. 21
 Ryder, E. A. Unilateral tolerances for drilled and reamed holes. Oct. p. 27
 Rylander, A. E. Automatic hoppers speed assembling. Sept. p. 17
 Rylander, A. E. Cost cutting with rotary swaging. Oct. p. 17
 Rylander, A. E. Developments in metal stitching. Dec. p. 32
 Rylander, A. E. Fundamentals of tool engineering. Aug. p. 59; Sept. p. 39; Oct. p. 39; Nov. p. 36; Dec. p. 38
 Rylander, A. E. Metal spraying—a modern production process. Nov. p. 25
 Rylander, A. E. Plant layout and materials handling. Jan. p. 17; Feb. p. 31; Mar. p. 41
 Rylander, A. E. The tool engineer's industrial exposition in review. May p. 35

S

Safety. Industrial. (H. L. Smith) Apr. p. 25
 Satoski, Joseph. Tool for oil grooving. July p. 36, Gadget
 Sawin, Dr. N. N. Precision measuring instruments made from wood. June p. 27
 Schaphorst, W. F. Chart for wooden beams. Mar. p. 51, Gadget
 Schaphorst, W. F. Conveyor life doubled. Apr. p. 41, Gadget
 Schaphorst, W. F. Formulas for rope. Feb. p. 43, Gadget
 Schmidt, A. O. and Roubik, J. R. Some thermal aspects of metal cutting. Nov. p. 20
 Schulze, Arthur P. Roto-finish spurs finishing economies. Apr. p. 35
 Scrap drive helps to solve steel shortage. Aug. p. 29, Short
 Screw feed for tailstock. (James Maltby) July p. 35, Gadget
 Screw thread standardization. Nov. p. 33, Short
 Seekins, H. L. Balancing supercharger rotors. Jan. p. 25
 Selective hardening of wear surfaces. (J. F. Libsch and R. D. Guess) May p. 31
 Self-aligning back rest. (Edmund L. Johnson) Jan. p. 65, Gadget
 Servicing of motor-generators a precision job for San Francisco branch of General Electric. Sept. p. 29, Short
 Shaeffer, Robert W. Patterns from casting resins. June p. 31
 Simple drill jig. (Frederico Strasser) Mar. p. 51, Gadget
 Simple gage for wire. (Edward Diskavitch) Apr. p. 41, Gadget
 Simple roll-over fixture for automotive frames. Jan. p. 29, Short
 Single vs multi-turn induction heating coils. (Frank W. Curtis) Oct. p. 38
 Skog, Gunnar. New pantograph simplifies duplicating. Feb. p. 26
 Skog, Gunnar. The tool engineer's industrial exposition in preview. Mar. p. 17
 Smith, H. L. Industrial safety and the tool designer. Apr. p. 25
 Some factors in carbide die construction. Dec. p. 30, Short
 Some thermal aspects of metal cutting. (A. O. Schmidt and J. R. Roubik) Nov. p. 20

Somers, O. H. Tools for dimensional quality control. Nov. p. 31
 Sommers, Gordon H. Analytical determination of radial cam profile. May p. 17
 Spinning. Automatic. Stainless steel. (Arnold Hildebrandt) Sept. p. 29
 Stacking for die storage. Nov. p. 32, Short
 Standardized guns cut welding costs. (Rex Heath) Sept. p. 36
 Stewart, Harry L. Air and hydraulic clamping for jigs and fixtures. Dec. p. 25
 Stinson '48 flying station wagon makes its bow to the flying public. May p. 30, Short
 Strasser, Frederico. Combination die to cut and bend wire. Apr. p. 39
 Strasser, Frederico. Gravity pressure for drawing dies. Nov. p. 34
 Strasser, Frederico. Oscillating forming die. Aug. p. 62, Gadget
 Strasser, Frederico. Simple drill jig. Mar. p. 51, Gadget
 Stretch forming. Glass blanket. (Rex Heath) Aug. p. 58
 Strip mill. Electric control. Apr. p. 38, Short
 Supercharger rotors. (H. L. Seekins) Jan. p. 25
 Swaging. Rotary. (A. E. Rylander) Oct. p. 17

T

Tee-slots. Round. (from *Verstaderna*) Oct. p. 42, Gadget
 The "how" of a materials handling survey. (E. A. Ryder) Aug. p. 21
 The "how" of machining large work. (E. K. Morgan) Sept. p. 21
 The tool engineer's industrial exposition in preview. (Gunnar Skog) Mar. p. 17
 The tool engineer's industrial exposition in preview. (A. E. Rylander) May p. 35
 Thermostat. Bellows type. (John R. Parks) Feb. p. 27
 Things are really spinning. Sept. p. 38, Short
 To remove broken stub shafts. Oct. p. 41, Gadget
 Tool and die manufacturers. Meeting. Dec. p. 28, Short
 Tool design. Combination. (Robert Mawson) July p. 35, Gadget
 Tool engineering (defined). (Halsey F. Owen) Nov. p. 17
 Tool engineering. Fundamentals. (A. E. Rylander) Aug. p. 59; Sept. p. 39; Oct. p. 39; Nov. p. 36; Dec. p. 38
 Tool for oil grooving. (Joseph Satoski) July p. 36, Gadget
 Tool show preview. Feb. p. 44, Short
 Tool steel selection. (Harold Chambers) Nov. p. 18
 Toolholder for solid blanks. (C. W. Frank) Aug. p. 61, Gadget
 Tooling the Wright cyclone forged cylinder head. (F. E. Whitacre) July p. 17
 Tooling up the job. (Robert W. Haynes) Sept. p. 37
 Tools. Cutting. Engine lathe. (A. E. Rylander) Sept. p. 39
 Tools for boring operations. (A. E. Rylander) Oct. p. 39
 Tools for dimensional quality control. (O. H. Somers) Nov. p. 31
 Tools of today (Department): Jan. p. 67; Feb. p. 64; Mar. p. 74; Apr. p. 65; May p. 64; June p. 59; July p. 59; Aug. p. 66; Sept. p. 55; Oct. p. 55; Nov. p. 53; Dec. p. 57
 Tough tapping job made easy. June p. 35, Short
 Townsend, A. Francis. Piston pin hole production. Dec. p. 29
 Trade literature (Department): Jan. p. 96; Feb. p. 63; Mar. p. 73; Apr. p. 65; May p. 63; June p. 57; July p. 58; Aug. p. 65; Sept. p. 54; Oct. p. 54; Nov. p. 50; Dec. p. 56
 Truck frames. "Roll-over". Nov. p. 23, Short. See also Fixture, roll-over
 Tungsten carbide blanking dies. (E. J. Reiter and C. R. Harmon) Mar. p. 47
 Turret lathe. Job planning. (E. L. Murray) Feb. p. 17; Mar. p. 33

U

Unilateral tolerances for drilled and reamed holes. (E. A. Ryder) Oct. p. 27

V

Versatile collet chuck. (George W. Brown) Aug. p. 61, Gadget

W

War-time quality control methods fight postwar inflation. July p. 33, Short
 Walker, James. Drawing die problems and formulae. Jan. p. 31; Feb. p. 37
 Walker, James. Pros and cons of a formula for drawing shells. June p. 35
 Welding electrodes. Nomenclature and applications. (F. W. Myers, Jr.) July p. 29
 Welding. Standardized guns. (Rex Heath) Sept. p. 36
 Welding. Stud. Automatic cycle setup. Oct. p. 33, Short
 "Well sweep" balancer. Apr. p. 41, Gadget
 What is tool engineering? (Halsey F. Owen) Nov. p. 17
 When and how to use cast iron. (T. E. Eagan) Aug. p. 17
 Whitacre, F. E. Tooling the Wright cyclone forged cylinder head. July p. 17
 Who is to blame? Mar. p. 40
 Wide industrial uses for fume separator. Feb. p. 36, Short
 Winter, Paul H. Automatic feeding devices. Jan. p. 39
 Winter, Paul H. Modified geneva drive for hi-speed machines. May p. 23
 Winter, Paul H. Predetermined speed control of air cylinders. Aug. p. 27
 Winter, Paul H. Work ejector for drill press. Nov. p. 39, Gadget
 Winter, R. G. Gage for tapered diameters. Aug. p. 62, Gadget
 Wire, enamel coated. Coiling. (E. A. Ryder) Oct. p. 41, Gadget
 Work ejector for drill press. (Paul H. Winter) Nov. p. 39, Gadget
 World's fastest strip mill controlled by electric "brain". Apr. p. 38, Short

